

21C-0077

IN THE CLAIMS

1. (Previously presented) A one-part polyurethane resin composition for paint comprising:

about 30 to 50% by weight of a hard segment, the hard segment reducing drying time and recoating time of a film coated by the composition; and

about 50 to 70% by weight of a soft segment, the soft segment improving processing behaviors of the film including rolling and spraying properties.

2. (Original) A one-part polyurethane resin composition of claim 1, wherein the hard segment is at least one selected from the group consisting of an adduct of triol or a trimer of toluene diisocyanate, a trimer of 1,6-hexamethylene diisocyanate or a resin obtained by a Biuret reaction, an adduct of triol or a trimer of isophoron diisocyanate, and an adduct resin of triol or a trimer of diphenylmethane diisocyanate.

3. (Original) A one-part polyurethane resin composition of claim 1, wherein the soft segment is obtained by a reaction of at least one alcohol selected from the group consisting of polyether polyol, polyester polyol, neopentyl glycol, methylpropanediol, 1,6-hexanediol, ethylene glycol, propylene glycol, 1,4-butylene glycol, 1,3-butylene glycol, trimethylol propane, trimethylol ethane and castor oil, and at least one isocyanate selected from the group consisting of toluene diisocyanate, 1,6-hexamethylene diisocyanate, isophoron diisocyanate and diphenylmethane diisocyanate.

21C-0077

4. (Previously presented) A one-part polyurethane resin composition comprising about 20 to 50% by weight of a hard segment, the hard segment reducing drying time and recoating time of a film coated by the composition; and

about 50 to 80% by weight of a soft segment, the soft segment improving processing behaviors of the film including rolling and spraying properties,

wherein the soft segment is obtained by a reaction of at least one alcohol wherein the alcohol comprises at least one polyol selected from the group consisting of polyether polyol, polyester polyol and mixtures thereof, and at least one glycol selected from the group consisting of neopentyl glycol, methylpropanediol, 1,6-hexanediol, ethylene glycol, propylene glycol, 1,4-butylene glycol, 1,3-butylene glycol, trimethylol propane, trimethylol ethane and castor oil.

5. (Original) A one-part polyurethane resin composition of claim 4, wherein the polyol is a linear type and a content of polyol having a weight average molecular weight of about 500 to 3000 is about 30 to 70 % by moles with respect to total moles of the alcohol.

6. (Original) A one-part polyurethane resin composition of claim 1, wherein isocyanate content (NCO %) of the one-part polyurethane resin composition is about 4 to 15%.

7. (Previously presented) A one-part polyurethane resin composition for paint comprising:

a polyurethane resin mixture comprising

about 30 to 50% by weight of a hard segment, the hard segment reducing drying time and recoating time of a film coated by the resin, and

about 50 to 70% by weight of a soft segment, the soft segment improving processing behaviors of the film including rolling and spraying properties; and

a catalyst that is used in a copolymerization reaction of the hard segment and the soft segment.

21C-0077

8. (Original) A one-part polyurethane resin composition of claim 7, wherein an amount of the catalyst used in the copolymerization reaction of the hard segment and the soft segment is about 0.01 to 1.0 % by weight based on a total weight of the hard segment and the soft segment.

9. (Previously presented) A one-part polyurethane resin composition of claim 7, wherein the catalyst is at least one selected from the group consisting of methyl morpholine, ethyl morpholine, triethyl amine, dimethyl benzyl amine, dimethyl ethanol amine, ethylene diamine, dimethyl lauryl amine, dimethyl piperazine, triethylene diamine, tetramethyl ethylene diamine, tetramethyl hexamethylene diamine, 1,3,5-tridiaminomethyl phenol, 1,4-diaza-(2,2,2)bicyclooctane, hexamethyl triethylene tetramine, lead naphthenate, lead octoate, dibutyl tin dilaurate, tin ethyl hexanoate, zirconium octoate and zirconium naphthenate.

10. (Previously presented) A method of preparing a one-part polyurethane resin composition for paint comprising:
preparing a hard segment and a soft segment; and
copolymerizing a mixture including about 30 to 50% by weight of the hard segment, about 50 to 70% by weight of the soft segment, and 0.01 to 1.0 % by weight of a catalyst based on a total weight of the hard segment and the soft segment.

21C-0077

11-14 (Canceled)